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NEWS RELEASE: WEDNESDAY, SEPTEMBER 1, 2021


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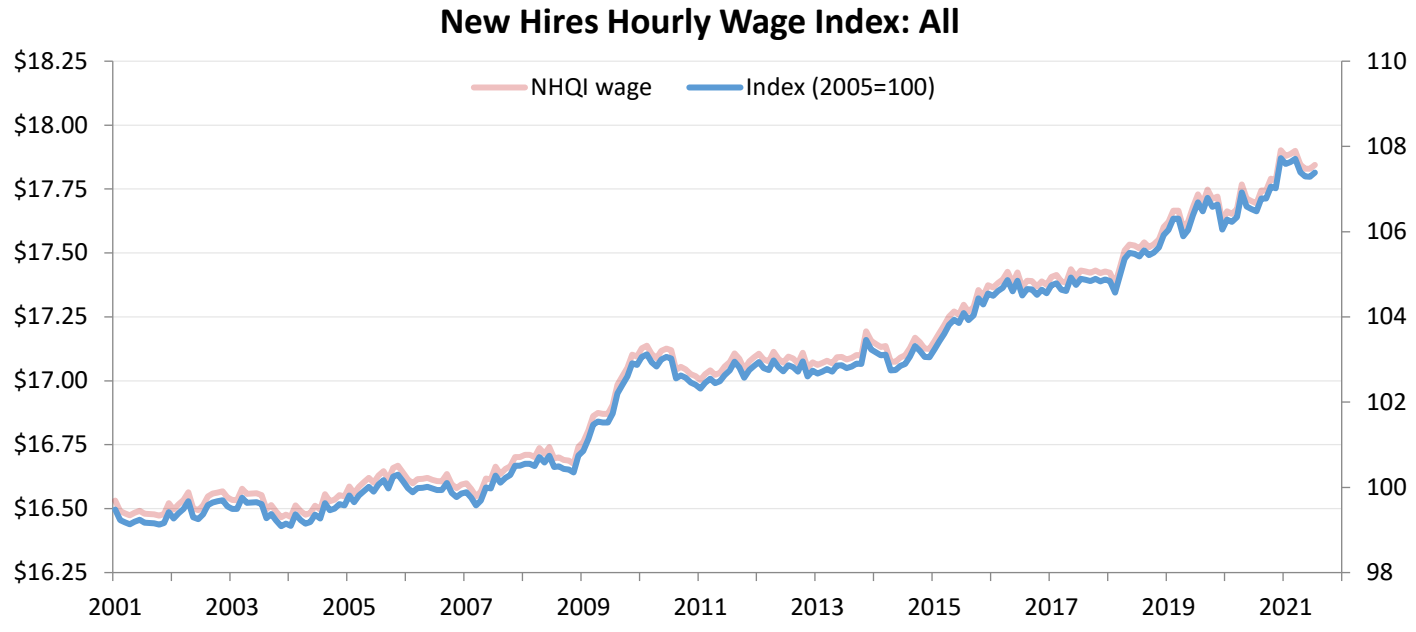
## Upjohn Institute New Hires Quality Index for July 2021 up 0.9 percent over the year and nearly unchanged since last month, plus special Labor Day look at actual real wage growth

KALAMAZOO, Mich.— In July 2021, the Upjohn Institute New Hires Quality Index shows inflation-adjusted hourly earnings power of individuals starting a new job was essentially unchanged from June but up 0.9 percent from a year prior, with a current reading of $17.84. This level stands 7.4 percent above its reading in 2005 and 1.0 percent above its reading right before the pandemic. Although the index has dropped slightly from its all-time peak this past winter, it is remarkable that a hiring recovery heavily concentrated in leisure and hospitality jobs has not exerted stronger downward pressure on the index. It is currently unclear whether the Delta variant—and expiring federal assistance in several programs—will slow this recovery in the remaining months of 2021.

The index and accompanying interactive database and report, developed by Upjohn Institute economist Brad Hershbein, fill a key gap in the measurement of hiring activity. The NHQI provides monthly updates on the volume and occupation-based wages of newly hired workers, and is available for different groups based on sex, age, education, and other characteristics.

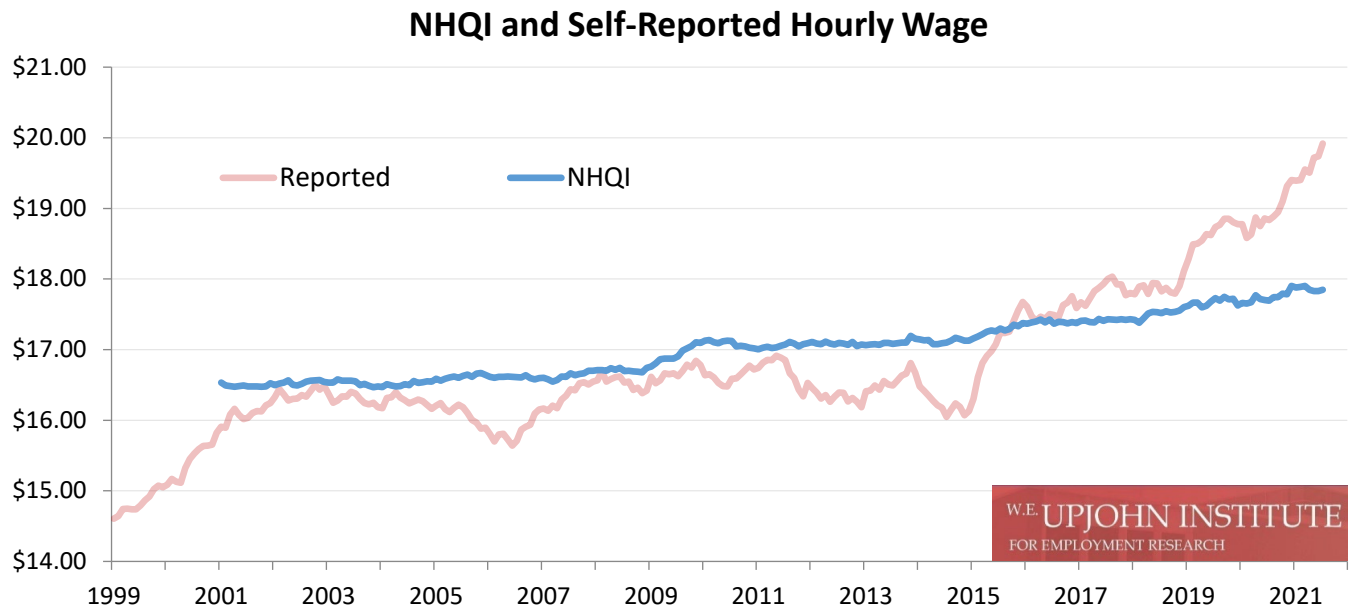



SOURCE: Upjohn Institute New Hires Quality Index

NOTE: The lighter line uses the left axis and shows the inflation-adjusted hourly wage of new hires. The darker line uses the right axis and shows the relative change since the base year of 2005.

For this month's release around Labor Day, we again showcase trends in actual, reported wages of newly hired workers and compare these with the NHQI. As documented in the FAQ below, the NHQI does **not** measure actual wages but rather the earnings power of newly hired workers as proxied by their occupation and demographic characteristics. While there are pitfalls to using actual wages of new hires (also described in the FAQ), they can sometimes be illustrative, especially when compared to the NHQI. In particular, because existing theory and evidence suggests that wages of new hires should be more responsive to economic conditions than wages of incumbents, looking at growth in the former can shed important insight on the strength—or possible weakness—of the labor market. This may be especially relevant during the COVID-19 jobs recovery, as wage growth among the continuously employed has changed little since the pandemic began, or perhaps slightly slowed, even as (nominal) wages of all employees have risen 7.1 percent over the same time horizon.[1]

The NHQI shows that newly hired workers have steadily become more skilled, with particularly sharp growth in 2018 and the winter of 2020–2021, but it does not address whether these workers are being paid commensurate with these higher skills, or how a stronger economy has translated into actual wage growth. The figure below plots the NHQI wage index (in blue) and the average self-reported wage of newly hired workers (in salmon); both are adjusted for inflation to year 2020 dollars.[2]




While NHQI trends tend to be gradual, given their construction, actual self-reported wages of new hires have tended to change in rapid spurts. As profiled earlier, there have been periods of rapid wage growth in the late 1990s, in the mid-2000s right before the Great Recession, in 2015, and in 2018. During other times wage growth has stalled or even turned negative. Over much of 2019 and into the summer 2020, both the NHQI and actual self-reported wages of new hires had leveled off, suggesting the labor market was cooling even several months before the pandemic began.

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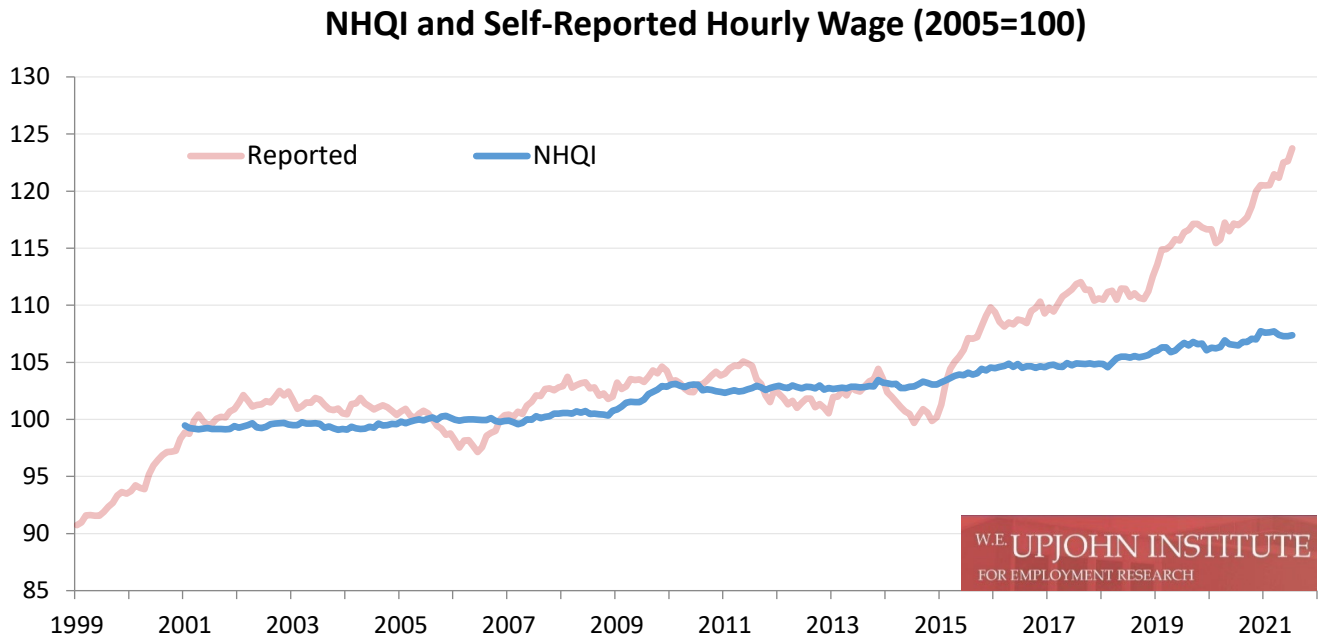
[1] Adjusting for inflation, hourly wages of all employees are up 2.7 percent since February 2020, and have been relatively stable in recent months, even as many low-earning leisure and hospitality workers have been hired.

[2] As detailed in the technical report, the reported wage includes only non-imputed responses, and for consistency with the NHQI, is also shown as a 12-month lagged moving average. The figure is an updated version of the one in the technical report and the July 2018, 2019, and 2020 releases.

Over the past 12 months (July 2020 to July 2021), however, wage growth has rapidly picked up steam, with reported (inflation-adjusted) wage growth of new hires up 5.7 percent, to $19.92 per hour and an all-time high. Although 5.7 percent growth is nothing to sneeze at, year-over-year wage growth of newly hired workers has been higher several times in the past, including in the periods mentioned above. An important difference, though, is those earlier periods did not represent hiring dominated by the low-paying leisure and hospitality sector, which has accounted for roughly one-third of all net jobs added over the past 12 months.

This sort of rapid compositional change in jobs lost last spring and jobs regained since makes comparisons with the wage growth of incumbent workers tricky. It can be more informative to instead compare the wage growth of new hires with the wage growth of workers employed in both July 2020 and July 2021. The Atlanta Federal Reserve Bank's Wage Growth Tracker shows that the median worker employed in both these months experienced nominal wage growth of 3.7 percent, but after adjusting for the high inflation we've seen in recent months from economy-reopening-related supply shortages, real wage growth was actually *negative* 0.5 percent.[3] This means that inflation-adjusted wages of new hires grew much faster than that of the steadily employed between the summers of 2020 and 2021, a large reversal from the preceding 12 months. A possible interpretation is that wage increases among those who kept their jobs during the pandemic have been measured as employers remained cautious about future profits, but that businesses that needed to rehire as the economy reopened had to rapidly raise wages to compete for labor that suddenly had many choices for where to work.

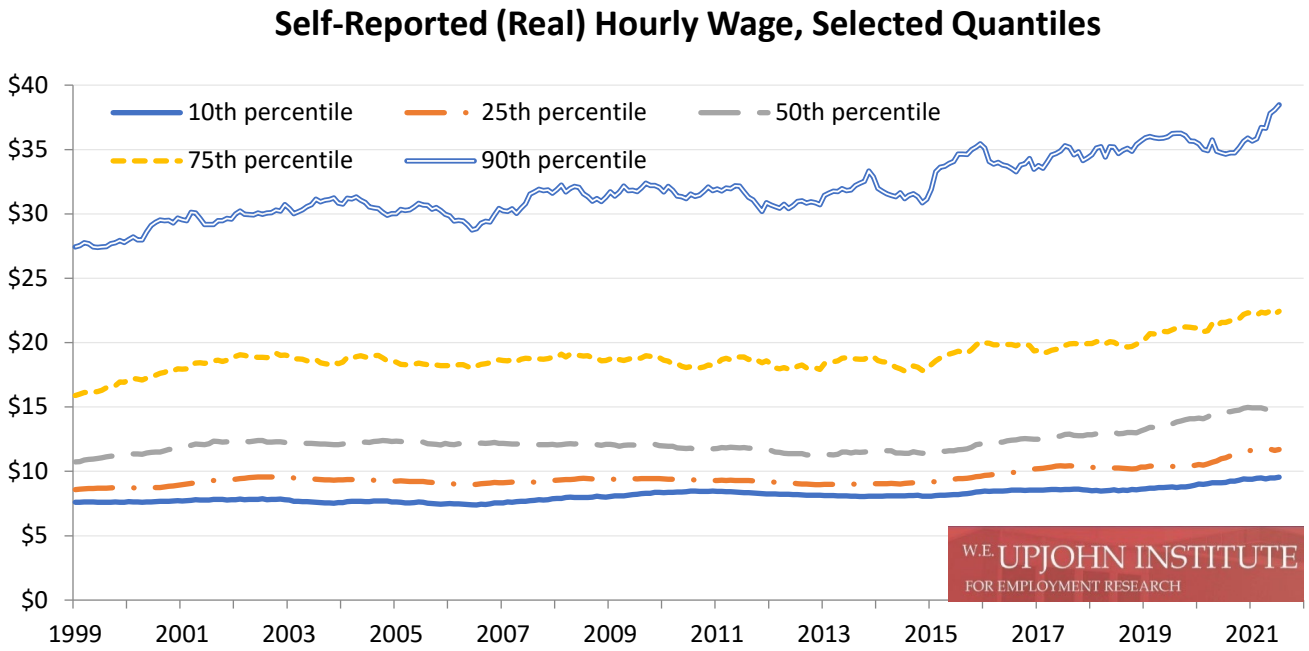
Moreover, the 5.7 percent real wage growth of newly hired workers was also much faster than the 0.9 percent increase in the NHQI wage index. Roughly speaking, the difference between the two series implies that real wage growth, controlling for changes in the occupations and demographics of new hires, is up 4.8 percent on average, a truly blistering pace.



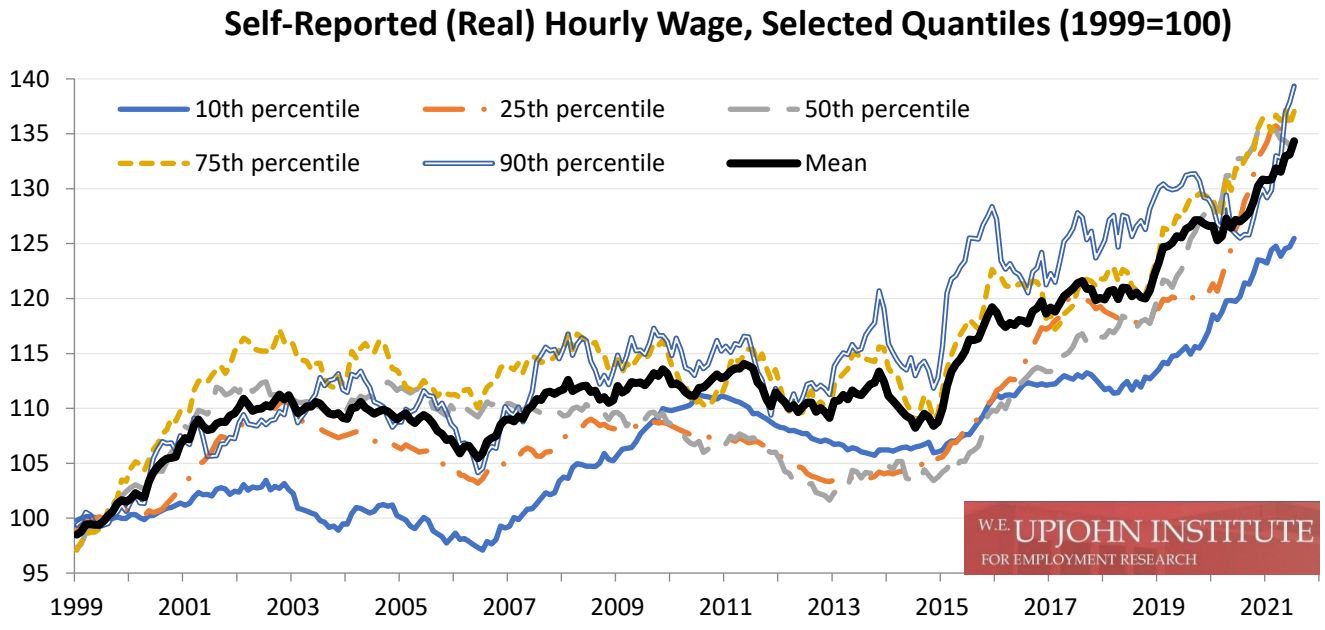

To understand longer-term changes, we normalize each wage series to its respective value in 2005, shown in the figure above. Inflation-adjusted, self-reported hourly wages of new hires have grown 23.7 percent since 2005, with essentially all this growth occurring since 2015. Netting out the 7.4 percent growth in the NHQI

[3] The Wage Growth Tracker shows *nominal* wage growth, unadjusted for inflation; the numbers shown here are adjusted for inflation in the same manner as the self-reported wage growth of new hires.

since 2005, composition-adjusted real wages of new hires have grown 16.3 percent, or about 0.95 percent per year. (Since 2015, they have grown 2.1 percent annually.)



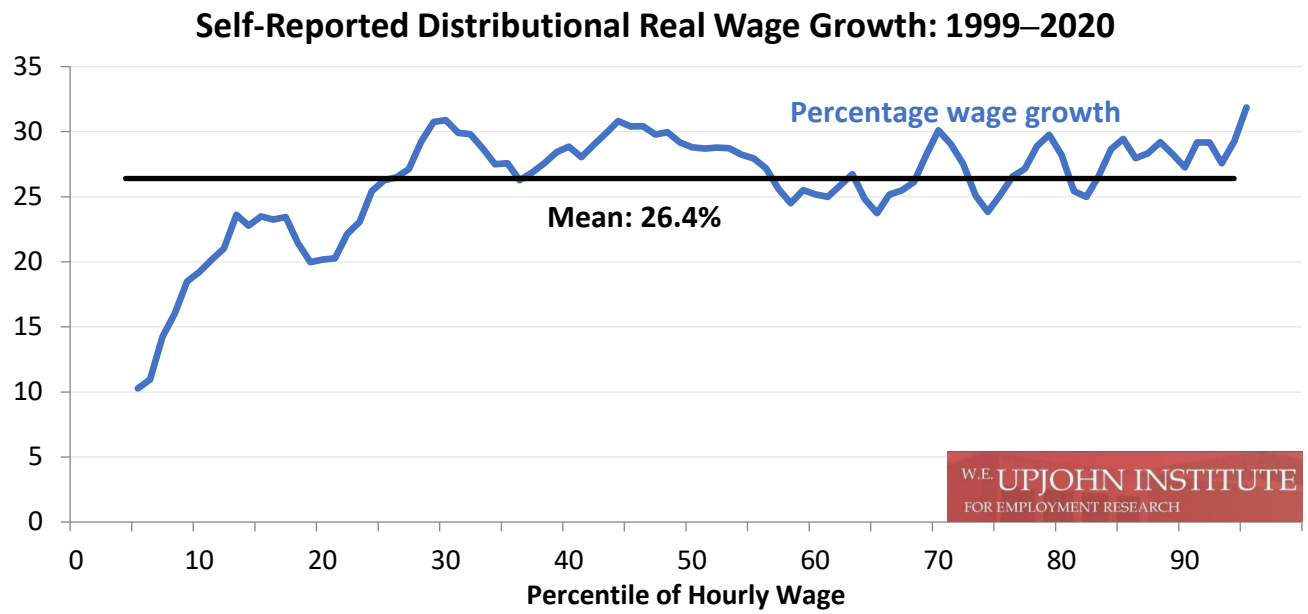

Growth in the average wage, however, does not necessarily mean that all parts of the wage distribution are growing similarly. Was the speedup over the past year widespread or concentrated among higher earners? The figure above provides context by showing the real hourly reported wage (in 2020 dollars) of new hires for different percentiles. For example, at the 10th percentile—the point at which 10 percent of new hires makes less and 90 percent make more—hourly wages in July 2021 were about $9.55, $2.30 above the federal minimum wage (but still below about half of states' minimum wages). In contrast, at the 90th percentile, wages were $38.47 per hour, more than four times as much. The 50th percentile, or median, where half of newly hired workers earn more and half earn less, was $14.80, much less than the mean value of $19.92 found above. Thus, earnings of the typical new hire (represented by the median) diverge quite a bit from the average, which is skewed by higher earners. The divergence speaks to the importance of looking at the entire wage distribution.



To see growth in the distribution more clearly, however, it is helpful to normalize the series. In the figure above, each selected wage percentile is normalized to its value in 1999, and the mean is included for reference. Since 1999, the average inflation-adjusted, self-reported hourly wage of new hires has increased by 34.6 percent (thick black line). This works out to an annualized rate of growth of 1.35 percent since 1999, but almost all this growth was concentrated in the late 1990s or since 2015. The average real wage of new hires was essentially unchanged between 2002 and 2015.

The graph also shows sizable deviations over the long term for the different percentiles. Since 1999, for example, the 10th percentile real wage of new hires has risen by 25.5 percent, while that for the median is up 34.2 percent, and that for the 90th percentile is up 39.3 percent. Over the past year, and despite all the media attention toward employers raising entry-level wages to attract new employees, the strongest growth has been at the top, with the wages of new hires at the 90th percentile up by a staggering 11 percent. This represents a reversal from last year, when wages of new hires at the top had actually declined. In contrast, new hire wages at other points of the distribution grew by smaller (but still sizable) amounts: 4.4 percent at the 10th percentile, 5.8 percent at the 25th percentile, an anemic 1.1. percent at the median, and 4.1 percent at the 75th percentile. Whereas last year there had been some convergence in the wages of new hires, narrowing inequality, this year returned to trend as wages of new hires—like those of all workers—continues to polarize.

Indeed, even if upward wage pressure for entry-level jobs survives the end of expanded unemployment insurance, looming evictions, and the so far relentless Delta variant of COVID, it likely still will not make much of a dent in narrowing the long-term new hires wage gap. The figure below shows cumulative (inflation-adjusted) hourly wage growth of new hires, for nearly the entire wage distribution, between the late 1990s and the most recent 36 months.[4] Over this more than 20-year period, wage growth has averaged 26.4 percent, and the upper three-quarters of new hires have stayed within a few percentage points of this growth number. The wage growth of the bottom quarter, however, has lagged behind considerably. Thus, the slower cumulative growth at the 10th percentile seen in the preceding graph extends to the bottom fourth of new hires. Clearly wage growth for newly hired entry-level employees still has a long way to go to catch up.




[4] The endpoints are the averages of 1998–2000 and August 2018–July 2021; 36-month averages are used to allow sufficient sample sizes to make comparisons over the whole wage distribution.

These statistics and many more, as well as interactive charts and data downloads, can be found at the website for the Upjohn Institute New Hires Quality Index: www.upjohn.org/nhqi.

The full report, including methodology, can be found here: http://www.upjohn.org/nhqi/reports/NHQI_report.pdf.

All data will be regularly updated during approximately the first week of the second month following the reference of the data release month. For example, data for August 2021 will be released during the first week of October 2021. To sign up to regularly receive monthly press releases for the Upjohn Institute New Hires Quality Index, visit: www.upjohn.org/nhqi/signup.

**FAQ**

**1. What is the New Hires Quality Index?**

The New Hires Quality Index (NHQI) is a consistent way of measuring the earnings power of people taking new jobs each month, allowing comparisons over time.

**2. How is the Index constructed?**

The Index is based on the occupations of newly hired workers as documented in the Current Population Survey, the same source used to produce the national unemployment rate each month. Separate data on the hourly wages for each occupation from another government survey, Occupational Employment Statistics, are connected to the newly hired workers in the Current Population Survey. These hourly wages are then statistically adjusted to account for differences in the demographic composition of new hires (sex, race and ethnicity, education, and age) before being averaged.

**3. Does the Index measure actual, reported wages of newly hired workers?**

No. Although the data used to create the Index do have some information on self-reported wages (or those reported by another household member), many economists consider these self-reported wages increasingly unreliable, as a growing fraction of workers refuse to answer the wage questions, and the government's attempts to impute (make an "educated guess") for these workers are problematic. Moreover, because relatively few workers are even asked the wage questions, and only a small subset of these are newly hired, use of the self-reported wage data would lead to very small samples.

The Index captures change in the wages of new hires due to both changes in the mix of occupations hired and the demographic characteristics of individuals taking new jobs. It will not capture change in the wages of new hires due to other factors, such as individual aptitude, geography, or employer characteristics.

A comparison of the Index with a series derived from the actual self-reported wages in the Current Population Survey can be found in the technical report. An analysis of self-reported wages can also be found in the July 2018, July 2019, and July 2020 press releases, as well as this press release.

**4. Does the NHQI count self-employed workers?**

No, the NHQI excludes self-employment or people who work for themselves.

**5. How often is the NHQI updated?**

Every month, with the release by the Census Bureau of the Current Population Survey microdata. Updates will be posted on the NHQI website during the first week of the month, covering data from two months ago. Data are currently available from January 2001 through July 2021. To receive updates through email or social media, visit the signup page.

**6. What data are available on the NHQI website?**

The NHQI website contains monthly data for all components of the NHQI. The four main components are: the hourly wage index, the hiring volume index, the wage bill index (the product of hourly wages and hiring volume), and the hires per capita index. Each component is available in its actual level or normalized to the base year 2005. In addition to providing data for all new workers, the NHQI exists for men, women, different age groups, different education groups, different races/ethnicities, different industry sectors, different regions, native and foreign-born, full- and part-time workers, and different types of new hires (the newly employed and employer changers). All data can be charted interactively or downloaded for separate analysis.